

REMARKS

The undersigned wishes to thank Examiner Kim for the courtesy extended in the telephonic interview of May 7, 2004. During the course of that interview the teachings of Matsuo, U.S. Patent No. 6,349,614 were discussed as were potential amendments to the claims which may put the claims in condition for allowance. However, no agreement was reached as to acceptable amendment of the claims to put the claims in condition for allowance.

Claims 1-16 have been presented for examination. Claims 3, 4, 7, 11-15 have been canceled and claims 6, 9 and 10 have been withdrawn. Claims 1, 2, 5, 8 and 16 remain at issue.

Claims 1 and 2 stand rejected under 35 USC § 112, first paragraph, as failing to comply with the written description requirement because of a lack of support in the written description for the term "inflexible tubing" in claim 1. Claim 1 has been amended to delete the term "inflexible tubing" and revert to the original language of "axially and radially rigid tubing." Accordingly, reconsideration and withdrawal of this ground of rejection are respectfully requested.

Claims 5 and 10 stand rejected under 345 USC § 102(e) as being anticipate by Matsuo, U.S. Patent No. 6,349,614.

Claim 5, as amended herein, is directed to a bicycle cable guide system for maintaining tension in a flexible cable extending between a cable actuated bicycle component and a cable actuator selectively applying tension to the cable. The bicycle cable system includes a first length of flexible housing having a select outer diameter and an inner diameter greater than the diameter of the cable and a straight length of axially and radially rigid tubing having sufficient rigidity over its length to prevent buckling of the tubing upon application of tension to the cable by the cable actuator, thereby virtually eliminating significant contact with the interior of the tubing and essentially eliminating friction over the tubing length, the straight length of axially and rigid tubing having an inner diameter greater than the diameter of the cable. A ferrule joins an end of the first length of flexible housing to a first end of the axially and radially rigid tubing.

It is noted that claim 1 is also amended to recite a cable guide system including a straight length of axially and radially rigid tubing having sufficient rigidity over its length to prevent buckling of the tubing upon application of tension to the cable by the cable actuator, thereby virtually eliminating significant contact with the interior of the tubing and essentially eliminating friction over the tubing length.

Applicant respectfully submits that claims 1 and 5, as amended, as well as dependent claim 8 are patentable over Matsuo. Matsuo is directed to a bicycle connector for splicing two cables in series. The Examiner states in the Office Action that Matsuo includes a straight length of axially and radially rigid tubing 654 along with the remaining elements of claim 5 (and presumably claim 1). However, the tubing 654 shown in Matsuo (see Fig. 12) is indeed a casing 654 of the nature of a conventional Bowden cable. (See column 6, line 31 and column 1, line 17). Bowden cables are by nature intended to be flexible or pliant or include a series of pivoted links such that a force or motion within a cable may be transmitted along a curved path. See Exhibit A, quoting the definition of "flexible transmitter, e.g. Bowden cable" in the USPTO Manual of Classification, Class 74/500.5. In order to clarify that the axially and radially rigid tubing of claims 1 and 5 is distinct from a Bowden cable, claims 1 and 5 have been amended to recite the axially and radially rigid tubing having sufficient rigidity over it's length to prevent buckling of the tubing upon application of tension to the cable by the cable actuator, thereby virtually eliminating significant contact between the cable and the interior of the tubing and essentially eliminating friction over the tubing length. As discussed in the patent specification, minimization of friction is a key element of the present invention and represents a significant improvement over Bowden cables which are flexible and under compression resulting from a tension on a cable residing therein will radially buckle thereby causing contact between the inner surface of the Bowden cable housing and the cable deployed therein, thus resulting in undesired friction increasing the effort necessary to apply tension to a cable by an actuator. Accordingly, Applicant respectfully submits claims 1 and 5, as currently amended, are novel and non-obvious over the art of record.

Claim 8 stands rejected under 35 USC § 103(a) as being unpatentable over Matsuo. Claim 8 is dependent from claim 5 and is now believed to be allowable for the same reasons set forth above with respect to claim 5. Furthermore, in light of the amendments to claim 5, cancellation of claim 8 is no longer believed required as claim 8 merely recites a specific cable actuated bicycle component with which the cable guide system is used.

Claims 5, 8 and 10 stand rejected under the judicially created doctrine of double patenting over claims 1-8 of U.S. Patent No. 6,439,077, since the claims if allowed, would improperly extend the "right to exclude" already granted in the '077 patent.

Applicant respectfully traverses this ground of rejection in light of the present amendments to claims 1 and 5. The claims of the '077 patent do not teach or suggest a straight length of axially and radially rigid tubing having sufficient rigidity over its length to prevent buckling of the tubing upon application of tension to the cable by a cable actuator, thereby virtually eliminating significant contact with the interior of the tubing and essentially eliminating friction over the tubing length. To the contrary, claims 1-8 of the '077 patent, which are directed to a cable feed for a cable actuated bicycle component, in no way suggest the axially and radially rigid tubing with the properties as set forth above. Accordingly, reconsideration and withdrawal of this grounds of rejection are respectfully requested. Applicant requests that should this grounds of rejection be removed, that the Examiner confirm Applicant will no longer be required to file a terminal disclaimer to overcome the double patenting rejection should the application be allowed.

For the reasons set forth above, Applicant respectfully submits the claims as amended are allowable over the art of record and reconsideration and issuance of a notice of allowance are respectfully requested. If it would be helpful to obtain favorable consideration of this case, the Examiner is encouraged to call and discuss this case with the undersigned.

This constitutes a request for any needed extension of time and an authorization to charge all fees therefore to deposit account No. 19-5117 if not otherwise specifically requested. The undersigned hereby authorizes the charge of any required fees not included or any deficiency of fees submitted herewith to be charged to deposit account No. 19-5117.

Respectfully submitted,



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